



## Francesca Vacante

Postdoctoral Scholar, Cardiovascular Institute

### Bio

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#### HONORS AND AWARDS

- Stanford Cardiovascular Institute Travel Award, Stanford Cardiovascular Institute (SCVI) (2026)
- Travel Grant for Early Career Investigators, Arteriosclerosis, Thrombosis and Vascular Biology (ATVB) (2026)
- Young Scientist Award in Basic Research, Vascular Pharmacology (2025)
- Stanford Cardiovascular Institute Recognition Award, Stanford Cardiovascular Institute (2025)
- Stanford Postdoc Champion Award, Stanford University (2025)
- Postdoc Innovation Award, Stanford University, Stanford University (2024)
- Poster Award, Cardiovascular Conference Stanford-Arizona-Morehouse-Alabama, Stanford Cardiovascular Institute (2024)
- Next-Gen Researcher Pilot Award, Chan-Zuckerberg Initiative (CZI) (2023)
- iTPA Translation Innovation Springboard, Edinburgh Innovations (2022)
- Cardiology Award, Cardiovascular Science, Edinburgh University (2021)
- Roger Wathsworth Award, British Society for Cardiovascular Research (2021)
- REA Pump Priming Award, British Heart Foundation (2020)
- iTPA Institutional Translational Partnership Award, Edinburgh Innovations (2020)
- Best Poster Award, European Vascular Biology Organization (EVBO) (2019)
- Innovation Challenge, Deanery of Clinical Sciences Funding, Edinburgh University (2018)
- Travel Award British Heart Foundation Excellence CoRE, British Heart Foundation (2018)
- Travel Award, RNA Society (2018)
- Studentship, British Heart Foundation Award FS/18/10/33413 (2018)
- Conference Travel Award, British Heart Foundation Excellence CoRE (2017)

#### BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Editorial Board Member, Vascular Pharmacology (2025 - present)
- Board Member, AHA Young Professionals Bay Area Division (2025 - present)
- Member, Inflammation and Heart Failure Committee, Council on Basic Cardiovascular Science, American Heart Association (2025 - present)
- Funder, President, Stanford Inspiring Women in Science and Healthcare (iWISH-Talks) (2025 - present)

#### STANFORD ADVISORS

- Joseph Wu, Postdoctoral Faculty Sponsor

## PATENTS

- Francesca Vacante, Andrew H. Baker. "United States Patent PCT/GB2023/051524 Activation of noncoding host gene loci.", Edinburgh University, Sep 1, 2023

## LINKS

- iWISH-Talks: <https://med.stanford.edu/cvi/events/iwish-talks.html>

## Research & Scholarship

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## LAB AFFILIATIONS

- Joseph Wu (9/1/2022)

## Publications

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### PUBLICATIONS

- **NEREA: A versatile computer vision-based software for analyzing angiogenesis.** *Cardiovascular research*  
Jimenez-Tellez, N., Casas-Ortiz, A., Vacante, F., Yang, X., Obejero-Paz, C., Wu, J. C.  
2026
- **The LncRNA MYRACL Regulates Human Oligodendrocyte Maturation and Myelination.** *Molecular therapy : the journal of the American Society of Gene Therapy*  
Tsarouchas, T. M., Vacante, F., Kazakou, N. L., Wagstaff, L., Bennett, M., Zoupi, L., Gibson, E. M., Baker, A. H., Williams, A.  
2025
- **Effective Transcriptional Induction of the CARMN/miR-143/145 Complex Locus in Smooth Muscle Cells Using CRISPR Activation.** *Arteriosclerosis, thrombosis, and vascular biology*  
Vacante, F., Sanchez-Esteban, S., Tsarouchas, T., Rodor, J., Bennett, M., Carroll, M. S., Beqqali, A., Baker, A. H.  
2025
- **Generation of two induced pluripotent stem cell lines from patients with Facioscapulohumeral muscular dystrophy.** *Stem cell research*  
Venkateshappa, R., Vacante, F., Xu, L., Canel-Rivero, G., Day, J. W., Wu, J. C.  
2025; 87: 103794
- **Targeting Cis-regulatory elements for CRISPR-mediated transcriptional activation of the human MIR503HG locus.** *Vascular pharmacology*  
Monteiro, J. P., Vacante, F., De Pace, A., Bennett, M., Rodor, J., O'Carroll, D., Wu, J. C., Quertermous, T., Baker, A. H.  
2025: 107521
- **Framework for Cultivating Leadership and Driving Growth.** *Circulation*  
Vacante, F., Yildirim, Z., Wu, J. C.  
2025; 151 (7): 430-432
- **Functional screening identifies miRNAs with a novel function inhibiting vascular smooth muscle cell proliferation.** *Molecular therapy : the journal of the American Society of Gene Therapy*  
Rodor, J., Klimi, E., Brown, S. D., Krillis, G., Braga, L., Ring, N. A., Ballantyne, M. D., Kesidou, D., Nguyen Dinh Cat, A., Miscianinov, V., Vacante, F., Miteva, K., Bennett, et al  
2025; 33 (2): 615-630
- **Effective CRISPR modulation of complex non-coding RNA loci.** *Nature reviews. Cardiology*  
Vacante, F., Baker, A. H.  
2025
- **Protocol to study electrophysiological properties of hPSC-derived 3D cardiac organoids using MEA and sharp electrode techniques.** *STAR protocols*  
Venkateshappa, R., Yildirim, Z., Zhao, S. R., Wu, M. A., Vacante, F., Abilez, O. J., Wu, J. C.  
2024; 5 (4): 103406
- **Generation of Marfan syndrome-specific induced pluripotent stem cells harboring FBN1 mutations.** *Stem cell research*

Vacante, F., Venkateshappa, R., Htet, M., Yan, C., Wu, J. C.  
2024; 80: 103518

- **Lnc-ing epicardium-derived cells to cardiac remodelling: lncRNA-TARID as a novel antifibrotic option.** *European heart journal*

Wu, X., Vacante, F., Wu, J. C.  
2023

- **CARMN Loss Regulates Smooth Muscle Cells and Accelerates Atherosclerosis in Mice.** *Circulation research*

Vacante, F., Rodor, J., Lalwani, M. K., Mahmoud, A. D., Bennett, M., De Pace, A. L., Miller, E., Van Kuijk, K., de Bruijn, J., Gijbels, M., Williams, T. C., Clark, M. B., Scanlon, et al  
2021; 128 (9): 1258-1275

- **The function of miR-143, miR-145 and the MiR-143 host gene in cardiovascular development and disease.** *Vascular pharmacology*

Vacante, F., Denby, L., Sluimer, J. C., Baker, A. H.  
2019; 112: 24-30